



# Greening Headquarters' Update

OCTOBER 13, 2010

## Greening Updates:

*Office of  
Operations*

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## Green House Gases: What's happening now.

Greenhouse Gases (GHGs) allow sunlight to enter the atmosphere freely. Current thinking is that GHGs absorb and re-radiate some of the heat that would otherwise return to space, making Earth a warmer than normal place. GHGs classifications fall into three scopes. Scope 1 deals with direct GHG emissions owned or controlled by Federal agencies, such as fleet vehicles. Scope 2 deals with direct GHG emission from purchased utilities, such as electricity. Scope 3 deals with indirect GHG emissions, such as employee commuting and business travel. Executive Order 13514, *Federal Leadership in Environmental, Energy, and Economic Performance*, requires Federal agencies to measure and reduce their GHGs emissions in each of the three scopes. For more information on the USDA GHG emissions reduction goals, please see the USDA Strategic Sustainable Performance Plan (SSPP) at <http://www.greening.usda.gov/USDASSPP09-07-10.pdf> and go to page 4.

## Energy Management

Overall, considering the record breaking temperatures over the summer, the USDA Headquarters Energy Management Program went well in FY 2010. Our energy intensity was essentially the same compared to FY 2009. For the fourth straight year, our electrical usage dropped by over 4% compared to last fiscal year. Our steam usage also decreased by over 7% compared to last fiscal year. Due to the unusually hot weather (the hottest in 30 years), our chilled water usage increased by over 30% compared to FY

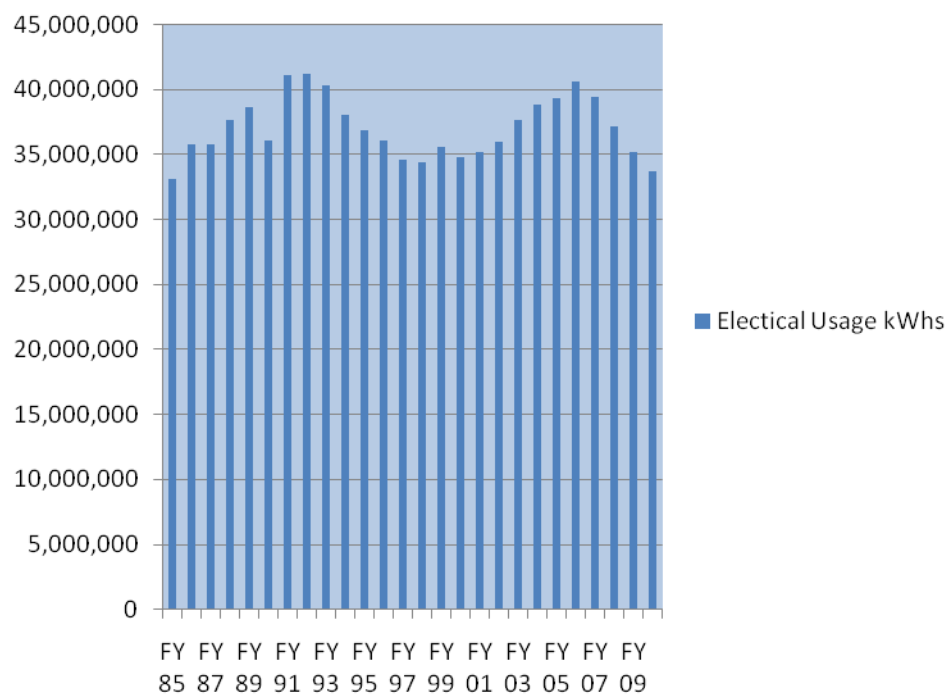


**Save Energy!**  
**Shut off lights**  
**when not in use.**

2009. The President has directed Federal facilities to reduce their energy use by 3% each year. USDA Headquarters is, therefore, in a good position to meet that goal.

As we reduced our environmental footprint, we saved several million dollars in utility cost and used a small portion of the energy savings to purchase 16.50 Mega-Watt Hours (MWhs) of renewable electrical energy credits to help off-set the impact of the electrical power we purchased in FY 2010

### USDA Headquarters Electical Usage FY 1985 to FY 2010



We are continuing our efforts to install newer, more energy efficient lighting in the Headquarters Complex. Light Emitting Diode (LED) lighting is one of the newer lighting technologies that we have been installing. We have recently installed LED candelabra lights in the Whitten Buffett chandeliers. Not only do they use less electricity, they last a lot longer than incandescent and CFL bulbs, thus saving on labor costs too.

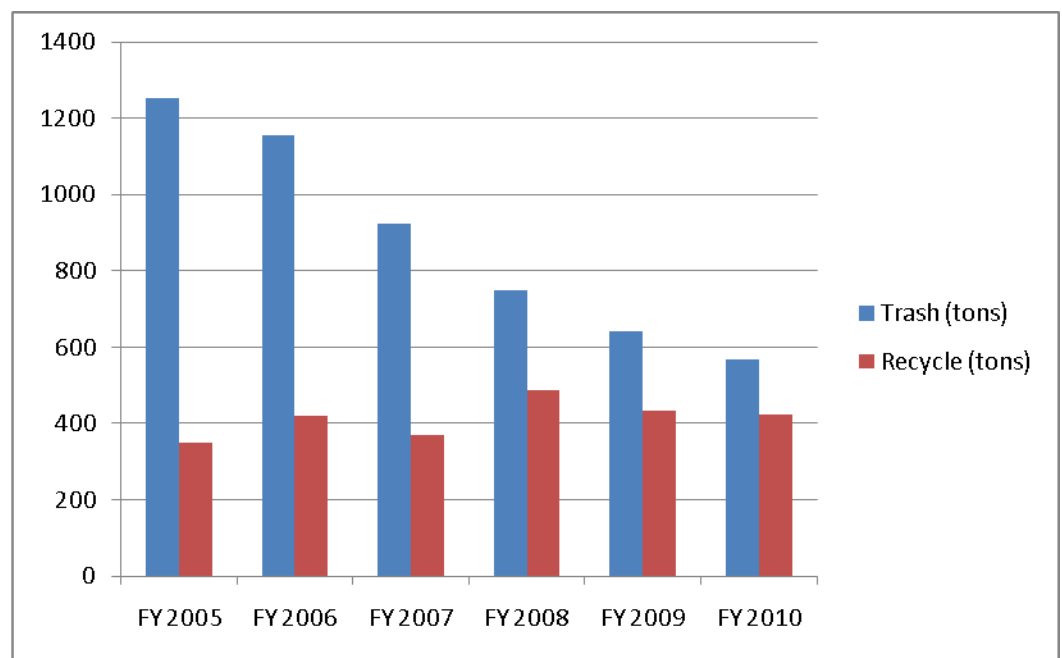


New LED candelabra lights in the Whitten Buffett chandeliers

## Waste Minimization & Recycling



**Recycling Saves  
Money!**



Last year the President mandated that Federal facilities increase their waste diversion rate to 50%. Our preliminary waste and recycle records indicate that we are moving closer to meeting that goal at the headquarters complex. Our records indicate that we are now recycling or composting approximately 45% of the waste. Our waste reduction efforts have pushed our diversion rates significantly higher.

In August, U.S. Forest Service interns sorted the trash from the Sidney R. Yates Building staff. The trash sort was intended to

develop a baseline and to provide insights for improving our recycling rates in the building. Details of the trash sort can be found here: <https://docs.google.com/Doc?docid=0AR3CrF-qXquYZDk2a2R0cl85MmYyejhzemY5&hl=en>



**A A A**

**Fonts Matter in  
saving email  
space!**

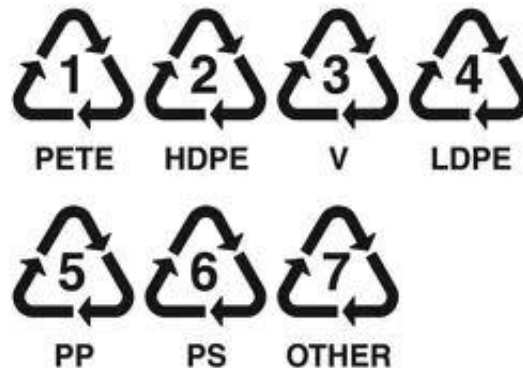
Did you know that the average U.S. office worker uses 10,000 sheets of paper a year? The average American uses approximately one 100-foot-tall Douglas fir tree in paper and wood products per year. (EPA's Wastes – Resource Conservation – Common Wastes & Materials – Paper Recycling Report) One simple way to reduce our environmental impact is to do double sided copying and to reduce the number of emails printed out.

### **Simple Way to Reduce Waste**

Did you hear that University of Wisconsin has found a new way to cut costs and waste with e-mail — by changing the font? The university has switched the default font on its e-mail system from Arial to Century Gothic. The university says the change sounds minor, but it will save money on printer ink when students print out e-mails in the new font. This newsletter uses Century Gothic font. This was featured on NPR and can be heard or read by clicking here:

<http://www.npr.org/templates/story/story.php?storyId=125639616>

## What Does The Little Number Within The Symbol Mean?



**Keep our Earth  
Green!**

Not too long ago I was in the South Cafeteria and noticed that a woman was frustrated that she could not put her clear plastic clamshell in the recycle containers for bottles and cans. When I mentioned to her that the plastic was polystyrene and that our recyclers don't accept that type of plastic, she looked at me in annoyance and said that the clamshell had a recycle symbol on it so it was of course recyclable!

What do those little symbols with the numbers mean? Does this mean it an item is recyclable? Actually, no. Despite the chasing arrow design, the symbols have nothing to do with whether it is recyclable or not. The little number found within this symbol is known as a "plastic resin code." It indicates the family of plastics from which the container is made. There are many different "families of plastics" which include the **Ethelenes** ("PETE" [indicated by the #1], "HDPE" [#2], & "LDPE" [#4]), the **Vinyls** (including "V" and "PVC" [#3]), the **Propelenes** ("PP" [#5]), the **Styrenes** (a.k.a. "Styrofoam" [#6]), and the **"Others"** [#7] which do not have a traditional "plastic container family." "Other" plastics can include acrylic, nylon, or the new "corn plastic" (a.k.a "PLA" or "Polylactic Acid").



## Sustainable Landscaping News



**People's Garden  
has its "Certificate  
of Organic  
Operation!"**



It's official! Our crops are certified organic! The Whitten Building's People's Garden (vegetable garden component) has received its "Certificate of Organic Operation," from Pennsylvania Certified Organics. Our crop (specifically produce and herbs grown in our vegetable garden) are deemed compliant with the USDA's National Organic Program.

There have been many small incremental changes in our efforts to "green" our landscaping. One recent change is that our landscape workers will be using new propane-powered trimmers and blowers for the Whitten grounds. This equipment which is fueled with propane gas, reduces emissions by 97% and is much quieter than gas-powered models. Using the trimmers and blowers, along with the electric mowers, will help reduce air quality problems in the city.



After some delays over the summer, the planting of the new Court 5 green roof is nearly completed. The new green roof is designed to provide waving patterns of color throughout the growing season. By this time next year, the green roof plants should be filled out, providing the occupants in the surrounding offices a colorful array of beauty.



The new Court 5 green roof.



On Saturday October 2, USDA Executive Master Gardeners completed the installation of the newest People's Garden at George Washington Carver Center (GWCC). The front of the GWCC now features three new pollinator gardens at the entry building.



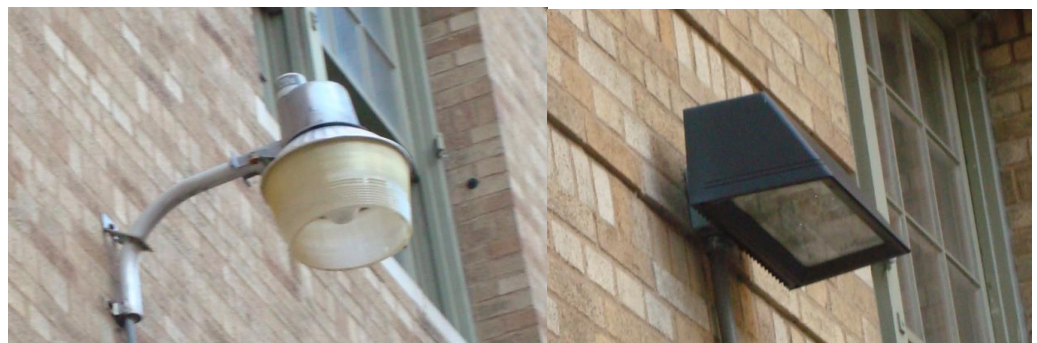
## The South Building Modernization

The South Building Modernization (Wing 5) is proceeding on schedule. Construction workers have been installing drywall, air conditioning ductwork and electrical conduit. When the work is completed, we will be one-step closer to obtaining our certification designating the South Building as a “green” building through the Leadership in Energy and Environmental Design (LEED) program. While construction workers are working in Wing 5, engineers and architects are planning the next phase of the South Building Modernization, the modernization of the South Building Cafeteria.



**South Building  
Modernization  
Progress**

Many “green” features have been incorporated into the Wing 5 modernization. Many are not obvious. One of the more subtle features will be the new lighting system for Court 4. One of the many objectives of the modernization is the reduction of nighttime light pollution on our skies. To accomplish this, the exterior lighting in Court 4 will be replaced with lighting that directs all its lighting to the parking surfaces while minimizing light directed to the night sky.



The old style exterior light to the left will be replaced with lights designed to reduce nighttime light pollution. These light are similar to those that have already installed in Court 3 during an earlier phase in the South Building Modernization (shown on the right).

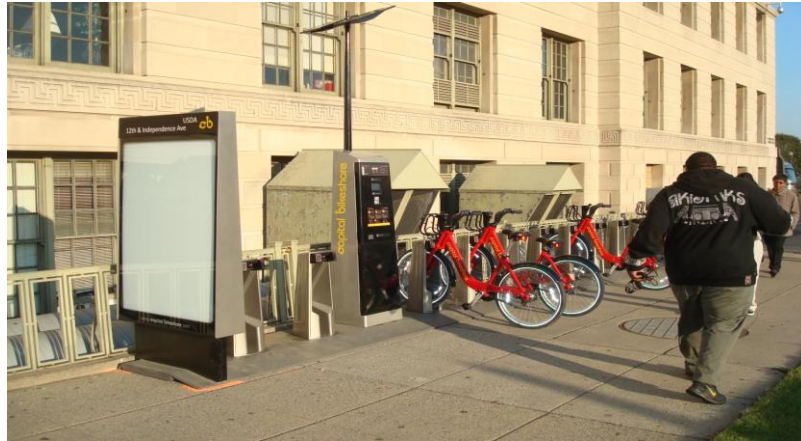




**Reducing our  
environmental  
footprint –**

**Bike!**

## Alternative Transportation



If you have not already noticed, there is a new Capital Bike share station on 12<sup>th</sup> street near the Smithsonian Metro station. For more information on the Capital Bike share program, click here <http://www.opm.gov/news/opm-dot-and-gsa-announce-federal-partnership-with-capital-bikeshare-program,1601.aspx>